

# Cell-type specific sex transformations

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Updated date: Aug 10, 2021

 An abbreviated version of this protocol was published in eLIFE in Nov 2020

Direct glia-to-neuron transdifferentiation gives rise to a pair of male-specific neurons that ensure nimble male mating

DOI: 10.7554/eLife.48361

## Detailed protocol

Sex transformation constructs were made by PCR fusion of the regulatory sequences of *grl-2* (ref. 34) directly upstream of the ATG of *fem-3::SL2::mCherry* 18,35–37. These constructs include the *unc-54* 3' UTR. The *grl-2* promoter included 862 bp upstream of the ATG start codon (this is a smaller region of the promoter from that used in ref. 34). We checked transgenes driven by this promoter for embryonic expression and saw no expression before the birth of the AMSo.

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**How to cite:** (Readers should cite both the Bio-protocol preprint and the original research article where this protocol was used)

1. Barrios, A. and Poole, R. (2021). Cell-type specific sex transformations. *Bio-protocol Preprint*. [bio-protocol.org/prep1336](https://bio-protocol.org/prep1336).
2. Molina-García, L., Lloret-Fernández, C., Cook, S. J., Kim, B., Bonnington, R. C., Sammut, M., O'Shea, J. M., Gilbert, S. P., Elliott, D. J., Hall, D. H., Emmons, S. W., Barrios, A. and Poole, R. J. (2020). Direct glia-to-neuron transdifferentiation gives rise to a pair of male-specific neurons that ensure nimble male mating. *eLIFE*. DOI: [10.7554/eLife.48361](https://doi.org/10.7554/eLife.48361)

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